WHAT IS CLAIMED IS:

1   1.   A computer system comprising:

2   a forwarding element adapted to perform data forwarding in a computer network;

3   a control element adapted to perform network signaling and control in the

4   computer network, wherein the control element is adapted to generate a standardized data

5   set for configuring the forwarding element;

6   an interconnecting element operatively connecting the forwarding element to the

7   control element; and

8   a forwarding element plugin integrated with the control element for receiving the

9   standardized data set from the control element, translating the standardized data set into a

10   specialized data set, and transmitting the specialized data set to the forwarding element to

11   configure the forwarding element, wherein the forwarding element utilizes the

12   specialized data set to configure the forwarding element for performing data forwarding

13   in the computer network.

1   2.   The computer system according to claim 1, further including an opaque

2   forwarding element plugin for receiving the standardized data set from the control element and

3   transmitting the standardized data set to the forwarding element plugin, and for receiving the

4   specialized data set from the forwarding element plugin and transmitting the specialized data set

5   to the forwarding element.

1   3.   The computer system according to claim 1, wherein the specialized data set is a

2   binary large object.

1   4.   The computer system according to claim 1, wherein the forwarding element

2   further includes a decapsulator that receives the specialized data set and decapsulates the

3   specialized data set into data readable by a device-specific forwarding element interface of the

4   forwarding element to configure the forwarding element.

1   5.   The computer system according to claim 1, wherein the specialized data set is

2   transmitted to a decapsulator in the forwarding element for decapsulating the specialized data set.

1   6.   The computer system according to claim 1, wherein the specialized data set is

2   encrypted before transmission to the forwarding element, and the encrypted specialized data set

3   is decrypted at the forwarding element.

1   7.   The computer system according to claim 1, wherein the forwarding element

2   plugin is a dynamic link library.

1   8.   A method of configuring a computer device, the method comprising:

2   generating a standardized data set by a control element for configuring a

3   forwarding element;

4   transmitting the standardized data set from the control element to a forwarding

5   element plugin integrated with the control element;

6   translating the standardized data set into a specialized data set; and

7   transmitting the specialized data set to the forwarding element for configuring the

8   forwarding element.

9.   The method according to claim 8, wherein the forwarding element is adapted to

perform data forwarding in a computer network.

1   10.   The method according to claim 8, wherein the control element is adapted to

2   perform network signaling and control in a computer network.

1   11.   The method according to claim 8, further including:

2   receiving the standardized data set by an opaque forwarding element plugin from

3   the control element; and

4   transmitting the standardized data set by the opaque forwarding element plugin to

5   the forwarding element plugin.

6

7   12.   The method according to claim 8, further including:

8   receiving the specialized data set by an opaque forwarding element plugin from

9   the forwarding element plugin; and

10   transmitting the specialized data set by the opaque forwarding element plugin to

11   the forwarding element.

1   13.   The method according to claim 8, further including:

2   decapsulating the specialized data set into data readable by a device-specific

3   forwarding element interface of the forwarding element for configuring the forwarding

4   element.

1   14.   The method according to claim 8, wherein the specialized data set is a binary

2   large object.

1   15.   The method according to claim 8, further including:

2   encrypting the specialized data set before transmitting the specialized data set to

3   the forwarding element; and

4   decrypting the specialized data set at the forwarding element.

1   16.   The method according to claim 8, wherein the forwarding element plugin is a

2   dynamic link library.

1   17.   A forwarding element plugin software program comprising:

2   a computer-readable medium; and

3   a computer-readable program code, stored on the computer-readable medium,

4   adapted to be integrated with a control element for configuring a forwarding element, the

5   computer-readable program code performing,

6   receiving a standardized data set for configuring the forwarding element

7   generated by the control element,

8   translating the standardized data set into a specialized data set, and

9   transmitting the specialized data set to the forwarding element for

10 configuring the forwarding element.

1   18.   The forwarding element plugin software program according to claim 17, wherein

2   the computer-readable program code further performs:

3   receiving the standardized data set from an opaque forwarding element plugin;

4   and

5   transmitting the specialized data set to the opaque forwarding element plugin.

1   19.   The forwarding element plugin software program according to claim 17, wherein

2   the computer-readable program code further performs:

3   encrypting the specialized data set before transmission to the forwarding element.

1   20.   The forwarding element plugin software program according to claim 17, wherein

2   the specialized data set is a binary large object.

1   21.   The forwarding element plugin software program according to claim 17, wherein

2   the computer-readable program code is a dynamic link library.